AN EVALUATION OF FIRE SERVICE ACREDITATION AND ISO GRADING PROCESSES AS ORGANIZATIONAL SERVICE QUALITY TOOLS

EXECUTIVE DEVELOPMENT

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ABSTRACT

During recent strategic planning workshops, members of Sunrise Fire Rescue identified the pursuit of accreditation as a method for improving service and marketability. There were problems with this approach. First, what impact would the pursuit and attainment of accreditation have on the organization? Second, would it be worthwhile for Sunrise Fire Rescue to continue attempts to improve its ISO rating? The purpose of this applied research project was to evaluate the ISO grading and Commission on Fire Service Accreditation (CFAI) processes for applicability as contemporary quality service/marketing tools.

The procedures used to evaluate these processes included an extensive literature review, telephone interviews, and the use of four separate survey instruments.

This project utilized the evaluative research methodology to answer four research questions: Is the ISO grading schedule an appropriate tool for use in organizational improvement and marketing? Should Sunrise Fire Rescue continue to actively seek an improved ISO rating? Should Sunrise Fire Rescue utilize the CFAI accreditation process as a means for improving service quality? How has the CFAI accreditation process impacted other agencies?

The results indicate that the ISO process was never designed for fire department use and has very limited fire service applications. The CFAI accreditation process has been well received by departments that have chosen to use it. Some sources did however identify the CFAI process as very time and labor intensive. The surveys indicated, among other things, that many departments were still unfamiliar with the accreditation process.

Recommendations included: Sunrise Fire Rescue should not seek an improved ISO rating; ISO should once revise its grading schedule with input from the fire service; the CFAI and IAFC should increase industry wide awareness of the accreditation process; Sunrise Fire Rescue should pursue accreditation; and all fire departments should conduct a self assessment using CFAI criteria.

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INTRODUCTION

Current public attitudes toward taxation and government spending compel public managers to judiciously evaluate the efficiency, effectiveness, and quality of the public services they provide (Mullen, 1995). The problem was that the City of Sunrise Fire Rescue Department had been attempting to improve its image and level of service for the last decade and directed a significant amount of time and resources towards the improvement of the its Insurance Services Office (ISO) grading classification. With the advent of the Commission on Fire Accreditation International (CFAI) self assessment and accreditation processes, Sunrise Fire Rescue staff was contemplating the usefulness and applicability of both the ISO and CFAI processes in improving service quality and organizational marketability. The purpose of this research was to perform an in depth evaluation of the benefits, impacts, and disadvantages of both of these processes.

This study uses evaluative research methodology to answer these questions:

- 1. Is the ISO grading schedule an appropriate tool for use in organizational improvement and marketability?
- 2. Should Sunrise Fire Rescue continue to actively seek an improved ISO classification?
- 3. Should Sunrise Fire Rescue utilize the CFAI accreditation process as a means for improving service quality?
- 4. How has the CFAI accreditation process impacted other agencies?

BACKGROUND and SIGNIFICANCE

The Insurance Services Office (ISO)

In 1889, the National Board of Fire Underwriters (NBFU) began evaluating community water supply and fire department facilities to determine a municipal fire protection classification (Cleveland, 1990). In 1916, the NBFU formalized these practices by publishing the first grading schedule for municipal fire protection (Coe, 1983). Coe went on to describe that "between 1922 and 1964, The Schedule underwent five different revisions, all without public sector input. In 1971 the insurance industry centralized all rating services under the umbrella of one organization with the formation of ISO. In 1973, ISO issued a new version of The Schedule, again without public sector input." Dykstra (1989) notes, "Today the Fire Suppression Rating Schedule (FSRS) examines municipal fire suppression capability considering three topic areas graded according to relative importance: Fire Department 50%, Water Supply 40%, and Fire Alarm Facilities 10%." The latest revision of the FSRS occurred in 1980.

The Commission on Fire Accreditation International (CFAI)

The International Association of Fire Chiefs (IAFC), in the spring of 1987, formed an Accreditation Committee. A joint agreement was signed in 1989 between the IAFC and the International City Management Association (ICMA) to develop a nationally recognized system for the voluntary accreditation of fire service agencies (Farrell, 1993). In April 1993, an initial alpha test was conducted with the Tempe (Arizona) Fire Department, which took the accreditation model and applied it to their organization

(Walter, 1996). From the lessons learned in Tempe, the document [self assessment process] was once again redrafted and the task force in June of 1993 sought departments that would be interested in applying to be considered as additional test sites for this process (Bruegman and Coleman, 1997). Thirty eight departments applied for beta test site status, and twelve were selected by the Accreditation Task Force based upon their ability to provide the agency composition and stratification needed to adequately test the accreditation model (Walter, 1996). In January of 1997, the CFAI was created. Bruegman and Coleman (1997) stated, "The CFAI is a nonprofit trust organization dedicated to the quality improvement of fire and emergency service agencies through self assessment." In 1997, the CFAI offered the process to the entire fire and emergency service spectrum. According to Ms. Mary Peterson of the CFAI (personal communications October 22, 1997), eleven agencies have now become accredited, an additional twenty agencies have applied for a site assessment in order to become accredited, and 194 agencies have registered with the CFAI; the first step necessary to attain accreditation.

The City of Sunrise Fire Rescue Department

The Sunrise Golf Village, a small hamlet of approximately 3,000 people, officially became incorporated as the City of Sunrise by an act of the Florida State Legislature in 1961. Fire protection for Sunrise Golf Village had been provided by a small group of Resident volunteer firefighters.

On June 12, 1972, then Mayor John Lomelo hired twelve members of the Sunrise Volunteer Fire Department as full time firefighters. The following year the Mayor hired

several paramedics and created the Sunrise Intensive Mobile Care Unit (S.I.M.C.U.). The S.I.M.C.U. was operated separately from the fire department and was one of the first paramedic units in the State of Florida. During the next few years, the City of Sunrise began to expand rapidly as a result of frequent annexations and the construction of thousands of condominium units which lured retirees from around the United States to Sunrise. The chief officers of the fire department were transitioned from the volunteer fire department and had very little fire service management experience. In 1978, the S.I.M.C.U. and Sunrise Fire Rescue Departments were merged to create the City of Sunrise Fire Rescue Department. The following year employees of Sunrise Fire Rescue chose to organize and become members of the International Association of Firefighters, Local 2662. As the city grew, additional stations were added and new apparatus purchased. Fire stations were either converted commercial structures or temporary mobile home structures with apparatus parked outside. From 1972 until 1982, there appeared to exist no formal long range planning or contemporary management practices. During the mid eighties, various staff members began to modernize the fire rescue department. This included the purchase of 5 pieces of custom fire apparatus designed around agency specific needs, an enhanced 911 system, nomex bunker gear for all employees, and new paramedic units. Additionally, during this period, members of the department created a hazardous materials response team and dive rescue team. In 1988 and 1989 political turmoil, both within the fire department and throughout the city resulted a period of little progress. Finally, In 1989 the residents of the City of Sunrise modified the city charter to switch from a strong mayor-council form of government to a manager-commission type government. A Fire

Chief was hired from outside the department. Simultaneously, the City of Sunrise was experiencing meteoric growth. As a result of the construction of two interstate highways and an extension of the Florida Turnpike system through Sunrise, the City's business and commercial development began to flourish. By 1990, the Sunrise had a population of 65,237 according to U.S. Census Bureau data. During 1994 the Fire Chief resigned. For the next three and a half years the fire department was led by a series of acting fire chiefs from within the organization. Members of the fire department's staff attempted to strive for excellence. In 1994 the Sunrise Fire Rescue Department received the State of Florida's "EMS Provider of the Year Award", and the Department's ISO rating was upgraded from a 5 to a 3. During 1996 Sunrise Fire Rescue paramedics placed first in the nation during international paramedic competition. Members of the department provided ancillary citizen services such as citizen CPR classes, a meals on wheels program, and a comprehensive fire prevention program. Despite these programs and accomplishments, long term planning, self assessment, benchmarking, and strong leadership remained largely absent in the organization.

In October 1997, a new fire chief was hired to manage the Sunrise Fire Rescue
Department. The Fire Chief possessed strong leadership and organizational skills.
During the next year the department completed its first strategic planning process.
Among the organizational goals developed by the strategic planning team were
attainment of fire service accreditation and increasing the department's image as
perceived by the City's leadership, residents and other departments. Moreover, the
topic of continuing to invest time and resources towards the future improvement of the
City's ISO rating continues to be debated by members within the department. The staff

of Sunrise Fire Rescue has, for at least the past 15 years, based apparatus purchases, equipment purchases, fire station locations, and training upon the ISO Fire Service Rating Schedule.

Lastly, the Sunrise Fire Rescue Department has undergone quite a bit of organizational and functional change during the last year. These changes, and the accompanying professional growth of the organization, necessitate that the departmental staff identify mechanisms for quality improvement, self evaluation and benchmarking in order to experience successful outcomes in the future.

The Executive Development course, offered at the National Fire Academy, presents a forum for fire service leaders to identify issues within their organization and conduct an applied research project in an effort to have the student "reach conclusions and offer recommendations which contribute to the improvement of their organization." This research project correlates with the issues and concepts explored in unit 10, (Quality Service/Marketing), of the Executive Development course and is of great significance in that it has resulted in a comprehensive examination of two processes currently being considered for utilization by Sunrise Fire Rescue. The results of this research provides this organization, as well as other fire service agencies, with insight into the pros and cons of the accreditation and ISO grading processes.

LITERATURE REVIEW

An exhaustive literature review was conducted at the National Fire Academy's Learning Resource Center (LRC) during June of 1998. The LRC exists as one of the largest repositories in the United States for information concerning fire and emergency services. The review process yielded considerable writings regarding the ISO grading process, but, perhaps due in part to its infancy, produced a limited amount of information regarding the CFAI accreditation program. The CFAI was contacted and subsequently supplied additional materials and data for this project.

ISO Grading

ISO is a nationwide, non-profit service organization serving the property and casualty insurance industry. It was formed in the early 1970's to consolidate most of the then regional and state insurance rating organizations. This was the result of the abolition of all of the fire rating bureaus and the services centralized in this one organization (Cleveland, 1990). The ISO Grading Schedule, and its predecessors, have been mistakenly used over the years as devices for measuring a fire department's effectiveness or a community's fire defenses. Even today much confusion exists, especially among non-fire service municipal leaders, as to the value to a modern-day community of having an ISO rating inspection (O'Dowd, 1994). Surprisingly, many fire chiefs are not informed about the impact of ISO grade ratings and how they are grouped together in the insurance industry for insurance rate assessment. Many fire chiefs will judge their departments on a scale of 1-10 and will stop at nothing to lower the grade from a five to a four without analytically weighing the financial savings against the

impact of implementation (Van Cleemput, 1995). Questions and conflicts concerning the ISO Schedule's effectiveness and its impacts on communities and their fire departments are as old as the schedule itself (O'Dowd, 1994). Fire departments have been significantly influenced by ISO standards, partly because of a lack of any other standards (Marsh, 1996). The schedule [ISO] has served the insurance industry well over these many years and the fire department needs to recognize that this is who the schedule is designed for and not the fire department (Cleveland, 1990). Marsh (1995) echoed Cleveland's position by stating, "While some of the literature reviewed called for changes to the ISO standards to better meet the needs of the fire service, I would suggest that ISO should not have to change for the fire service. The ISO standards are for insurance purposes, not for rating fire and rescue organizations." Cleveland (1990) elaborated further. "We should all recognize that the schedule should not be used to either appropriate funding for additional apparatus, manpower or facilities when the schedule has rated us poorly because of an apparent deficiency in these areas. Nor should we use it to build up our egos or the pride of our departments should the grading schedule indicate a low class [favorable] rating for a well equipped and manned department."

Harnish (1997), in researching the subject of using "the ISO Fire Suppression Rating Schedule as a planning tool", identified a 1995 study performed by Austerman, et al..

The study surveyed selected cities in an attempt to see if any correlation existed between ISO classifications (gradings) and per capita fire fatalities, per capita property losses due to fire (dollars), as well as per capita fire department operating costs.

Harnish scrutinized the Austerman paper and replicated the survey. Harnish's results

differed slightly from the Austerman project. Harnish observed that all the assembled data failed to demonstrate "any relationship between ISO classification and measures of fire service performance such as property loss and fire deaths... One correlation was found between ISO classification and characteristics of the study communities: cost." (Harnish, 1997) Several authors (Mullen, 1995; Marsh, 1996; Harnish, 1997) recommended that fire departments stop using the ISO grading schedule as a means to measure the performance of their departments and begin using the CFAI accreditation process as a more viable tool for benchmarking. The opinions of these authors were further bolstered by an excerpt from the first page of one of ISO's own publications, the *Fire Suppression Rating Schedule*: "The Schedule is a fire insurance rating tool, and is not intended to analyze all aspects of a comprehensive public fire protection program. It should not be used for purposes other than insurance rating."

A review of the most recent report from ISO to the City of Sunrise (ISO, 1993), revealed that during the May 24, 1994 evaluation by ISO, the City of Sunrise received a credit of 73.58 [out of a possible100] resulting in a classification of 3. This report also contained "improvement statements" outlining those areas which were necessary for a more favorable classification. Some of the improvements statements included:

- The addition of one dispatcher on each shift
- The addition of one more engine company
- The addition of a second ladder company
- The addition of a reserve ladder truck
- The addition of on duty company personnel by one
- Improve training records
- Improve pre-fire planning

Finally, the CFAI *Fire and Emergency Service Self Assessment Manual* was reviewed for any and all references to ISO and its process. An excerpt from section two

of the manual notes, "The ISO states that their regulations are not intended to design fire departments for cities. However, in a real and practical way, they do, for two reasons:

- Fire departments have been intensely influenced by ISO standards in past years; therefore, their basic structure is significantly ingrained into our society. In order to implement the needed change, data needs to be collected on a nationwide basis.
- 2. Insurance grading still remains a strong political influence because the general public or elected officials do not understand the limitations of fire protection operations. If the public perceives it pays less insurance rates because of fire department design, then pressure will not develop to alter the fire protection system to be more cost effective, regardless of their limitation.

It appears the ISO grading schedule results in unrealistic public expectations of the fire department emergency response system by focusing greater emphasis upon reactionary manual suppression rather than a total systems approach to fire protection (CFAI, 1997). "

CFAI Accreditation

Accreditation or to accredit basically means to recognize or vouch for a person, agency, or institution as conforming to a body of standards related to a specific discipline (Farrell, 1993).

In 1988, the IAFC and the International City Management Association executive boards signed a memorandum of understanding that committed both organizations to

developing a voluntary national fire service accreditation system (Walter, 1996). These efforts led to the creation of the CFAI in 1997. Bruegman and Coleman (1997) stated, "The CFAI is a nonprofit trust organization dedicated to the quality improvements of the fire and emergency service agencies through self assessment."

According to Walter (1996), "There are a number of benefits from conducting an accreditation program within the fire and emergency services, ranging from abstract concepts to practical day - to - day improvements, These benefits include:

- Promoting excellence within the fire and emergency services
- Encouraging quality improvement through a continuous self assessment process
- Providing assurance to peers and the public that the organization has defined missions and objectives that it strives to meet or go beyond
- Providing a detailed evaluation of a department and the services provided to the community
- Identifying areas of strengths and weaknesses within a department
- Providing a method for addressing deficiencies and building on strong points
- Providing a forum for the communication of management philosophies
- Generating a mechanism for developing concurrent documents including strategic and specific plans
- Offering the opportunity for a department to earn national recognition from peers and the public
- Fostering pride in the organization from department members, community leaders and citizens (Walter, 1996)

According to the CFAI *Fire and Emergency Services Self Assessment Manual* (1997), there are four major reasons for conducting an evaluation of fire service programs:

- when you are trying to cope with change;
- to provide for periodic organizational evaluations to ensure effectiveness;
- when there is change in leadership whether it be the fire chief, city/county manager, or elected officials; and
- to raise the level of professionalism within the organization and ultimately within the profession (section 1, p 3)

Accreditation provides a means for a fire and rescue agency to organize itself,

evaluate itself, to effect change and to receive recognition (Marsh, 1996).

Harnish (1997) wrote, "Rural Metro and every other fire department should pursue accreditation through the IAFC [now the CFAI]. This process is better structured to assist with planning and better provides a focus for those issues that actually bear on public safety and welfare – the essential missions of the fire service – than does the FSRS." It should be noted that Harnish's recommendation was the result of an applied research paper which sought to evaluate "The ISO Fire Suppression Rating Schedule as a Planning Tool."

Mullen (1995), in his study of the impact of fire service accreditation on the Naperville, Illinois Fire Department, stated, "Although the accreditation process does not guarantee success, it has provided the Naperville Fire Department with a comprehensive evaluation of the agency, an evaluation characterized by application of uniform methodology, self assessment according to recommended industry criteria and performance indicators, comment by independent external assessors, and administrative commitment to specific objectives for organizational improvement. It has provided specific data about the strengths and weaknesses of the organization which may serve as a foundation for future improvement and development."

Bruegman and Coleman (1997) wrote, "The experience throughout this entire project [CFAI accreditation] has proven that departments that have committed the resources to conduct this in depth self assessment, whether they ever plan to apply for accreditation in the future will assuredly be a much improved organization after having done the self assessment analysis."

The CFAI Fire and Emergency Service Self Assessment Manual was reviewed

thoroughly. The self assessment portion of the manual is broken down into ten categories to assist agencies in evaluating their performance. These ten categories are:

- Governance and administration,
- Assessment and planning,
- Goals and objectives,
- Financial resources,
- Programs,
- Physical resources,
- Human resources,
- Training and competency,
- Essential resources, and
- External systems relationships

Walter (1996) wrote, "Within these categories are 46 criteria to serve as measures or indexes on which a judgment or division can be based, and within these criteria are 235 performance indicators that define the desired level of ability to demonstrate a particular task as specified in the accreditation process."

Farrell (1993) stated. "Accreditation provides a means to evaluate resource allocation with regards to mission goals and objectives and allows for the independent evaluation of department operations."

While almost all of the literature reviewed for this project advocated the application of the CFAI self assessment process to all fire and emergency agencies, Mullen (1995) did offer a view of some of the disadvantages an agency might experience in conducting a self assessment and/or accreditation. He stated, "Naperville personnel spent over 2500 hours on accreditation related work. The salary equivalent of this time totals approximately \$31,000. Added together with the administrative costs for clerical staff (\$1200), training expenses (\$200), printing/mailing (\$800) and travel/lodging for the

site visit team (\$1600), total cost to the Naperville Fire Department equaled approximately \$34,000 dollars."

Marsh (1996) wrote, "A disadvantage of accreditation is the extensive time needed to perform the self assessment process, particularly in more complicated organizations. A commitment is required not only from the leadership, but from all of those who would be involved on the accreditation process."

Mullen (1995) also cited a 1994 study by Carter and Sapp which demonstrated that 72.3% of accredited police department surveyed identified the "time commitment involved in the self study" as the most frequently cited disadvantage to pursuing accreditation.

Brooks (1997) in reviewing his experience with the Greensboro, North Carolina Fire Department accreditation process felt that the self assessment process could be successfully completed with the following resources.

- 8-10 personnel,
- 1000 personnel hours, and
- an 18 to 24 month time frame

The accreditation process seeks to answer three very basic questions: 1) Is the organization effective? 2) Are the goals and missions of the organization being achieved? 3) What are the reasons for the success of the organization?

(CFAI, 1997).

Perhaps the greatest value of accreditation lies with its use as an evaluative tool to improve the essential character of services (Mullen, 1995).

Summary of the Literature Review

In summary, the review of published materials concerning the ISO grading schedule

had a profound influence on the researcher. The researcher had routinely reviewed the ISO grading criteria many times over the years and often based program decisions upon those criteria. As a result of the research and writings of the numerous authors cited within this paper, the researcher was able to re-evaluate the applicability and purpose of the ISO grading process.

The review of published materials concerning the topic of fire service accreditation was somewhat limited. With the exception of works produced by Mullen (1995) and Marsh (1996), a majority of writings about accreditation was promotional and/or biased. This led the researcher to seek additional data via interviews and surveys.

PROCEDURES

Although the literature review yielded a great deal of insight into the ISO process, information regarding the actual impact of the accreditation process was generally lacking. Moreover, after examining the literature collected, it became evident that additional information would be required regarding the effects of these processes on the various organizations that have chosen to pursue these benchmarks. In an attempt to gather the missing information, four survey instruments were prepared and utilized. The CFAI was able to supply a mailing list of all the accredited and registered agencies. American Fire Services of Hartford Connecticut, a fire service consulting firm, supplied the addresses and phone numbers of all the fire departments in the United States with an ISO class 1 rating. The Broward County Fire Chief's Association membership list was also obtained. The surveys were mailed directly to the attention of the Fire Chief/Director of each agency. A self addressed – stamped envelope was enclosed with each survey to increase the return rate. All the surveys were accompanied with a personalized cover letter explaining the purpose of the project and a request to have the completed survey form returned with three weeks. In cases where the surveys were not returned after the three week deadline, another letter and survey was faxed to the Fire Chief.

Survey One (Accredited Agencies)

The first questionnaire (see Appendix A) was developed specifically for those fire departments that had been awarded accredited status by the CFAI. This instrument requested that each department list their current ISO rating; identify whether or not they were attempting to raise their ISO rating; explain why they pursued accreditation;

describe any adverse effects of the accreditation process; identify the project leader and agree/disagree with a series of statements regarding the benefits of accreditation as advertised by the CFAI. Surveys were mailed to all eight accredited agencies that were accredited at that time. The return rate from this population was 100 percent.

Survey Two (Agencies actively seeking accreditation)

A second questionnaire (see Appendix C) was prepared specifically for all the agencies that were registered with the CFAI in August of 1998 (twenty five). This instrument like Survey One requested that the department list its ISO rating and identify whether or not they were attempting to raise their ISO rating. This particular instrument further sought to identify why the agency had registered with the CFAI; if they had begun the self assessment process; what they expected to gain from the self assessment process; if they planned on pursuing full accreditation from the CFAI and why they were seeking accreditation. The CFAI identified twenty five registered agencies. Surveys were mailed to all these departments and a total of twenty two (88%) were returned from this population.

Survey Three (U.S. fire departments with an ISO class 1 rating)

The third questionnaire (see Appendix E) was prepared for a population consisting of fire departments in the United States that had received an ISO class 1 grading.

American Fire Services, Inc. identified thirty such agencies. This particular survey sought information regarding how long the specific agencies had enjoyed an ISO class 1 rating; what benefits were realized as a result of achieving a class 1 rating; whether or not the agencies were aware of the CFAI accreditation process; and whether or not the agencies were pursing or contemplating the pursuit of CFAI accreditation. Only 16

agencies (51%) responded to the survey.

Survey Four (Broward County, Florida fire agencies)

The fourth survey instrument (see Appendix G)was developed for the population consisting of the twenty four fire departments in Broward County, Florida. This specific and very limited population was selected in order to gauge how other fire departments in the same geographical, demographic and economic region as the author's agency viewed the accreditation and ISO processes. Nineteen (79.16%) of the agencies surveyed within this population responded.

Interviews

Several interviews were conducted in an effort to obtain information that was more specific and contemporary to the topics examined. Telephone interviews were conducted during September 16th and 17th of 1998 with members of six original beta test sites for the initial accreditation model. The purpose of these interviews was to determine why these agencies never completed the accreditation process and how the process impacted their agencies. A telephone interview was conducted on November 19, 1998 with Mr. Ignatius Kapalczynski of American Fire Services in Hartford, Connecticut. The purpose of this interview was to obtain an insight into the historical perspective of the ISO/fire service relationship. A personal meeting was conducted with Ms. Carol A. Setzer of State Farm Insurance, at her Coral Springs, Florida office on September 14th 1998. The purpose of this interview was to examine the effects of the ISO municipal classifications on insurance premiums.

Assumptions and Limitations

It was assumed by the researcher that those responding to the surveys and

personal interviews were thoroughly knowledgeable on the subject and that they answered all inquiries honestly and candidly.

The primary limitation affecting this project was time. The time constraints imposed by the National Fire Academy prohibited a follow up to many of the respondents comments.

Another limitation was the extremely narrow focus of survey instrument number four, mailed to Broward County, Florida fire departments. While this survey revealed data from agencies of the same geographical and socioeconomic region as the researcher's, in retrospect this survey should have been expanded to all regions of the country to provide a more general and widespread picture of the issues addressed.

Finally, the survey instruments were not field tested for clarity and user friendliness.

Some confusion occurred with question two on surveys number one, two and four.

Fortunately, all the respondents who had difficulty determining what "more than a One" meant, provided enough detail in their answer to permit accurate and reliable data retrieval. In retrospect the survey instruments should have been exercised prior to being mailed out.

Selected Terminology

The following have been selected and clearly defined by the author to assist the reader in becoming more familiar with abbreviations and uncommon terminology.

Accreditation: For purposes associated with this paper, accreditation refers to the CFAI accreditation process involving the assessment, evaluation and recognition of an agency as applied to predetermined standards, criteria, and performance indicators.

Commission on Fire Service Accreditation International (CFAI): A nonprofit

organization which evaluates and awards accreditation to fire and emergency agencies.

Fire Service Rating Schedule (FSRS): The criteria and formulas used by the Insurance Services Office to assess fire departments and localities for purposes of establishing property insurance rates.

Grading Schedule: See Fire Service Rating Schedule

International Association of Fire Chiefs (IAFC): A professional organization serving various members of the fire service. The IAFC was one of two organizations instrumental in the creation of fire service accreditation.

International City Management Association (ICMA): A professional organization serving various municipal officials. The ICMA was one of two organizations instrumental in the creation of fire service accreditation.

Insurance Services Office (ISO): An organization which conducts assessments of communities in order to produce ratings for use by various insurance companies in determining property insurance premiums.

National Board of Fire Underwriters (NBFU): The primary agency which provided fire protection classification data to insurance companies during the period of 1889-1970.

The NBFU was merged into ISO in 1971.

Self Assessment: For the purposes of this research paper, self assessment is the process by where an organization evaluates itself using industry wide, pre-determined, standards, criteria, and performance indicators. The goal is to assist the agency in continually evaluating and improving services.

RESULTS

1. Is the ISO grading schedule an appropriate tool for use in organizational improvement and marketability?

This question had to broken down into two areas: organizational improvement and marketability. As a result of the literature review it became quite evident to the researcher that the ISO grading process should not be used as an organizational planning tool. The key to this was ISO's own disclaimer in the current edition (1980) of the Fire Service Rating Schedule. It states, "The schedule is a fire insurance rating tool, and is not intended to be used for purposes other than insurance rating." Several authors (Cleveland, 1990; Van Cleemput, 1995; Dutton, 1994; Harnish 1997) devoted a considerable portion of their research papers towards proving why and how the ISO grading process should not be used as a planning tool.

Regarding the marketability aspect of the ISO grading schedule, the results indicate that many departments have used their ISO classification for extensive public relations, marketability, and budget justifications. Moreover, the results of the surveys employed during this research found that many departments who have not yet achieved a class 1 rating from ISO are still attempting to do so.

Survey number one (see Appendix A) was mailed to all eight accredited departments and had a return rate of 100%. Questions one and two of this survey requested the agency's current ISO rating and asked if the department was actively seeking an improvement to their ISO rating. The results (see Table 1) were that two of the eight accredited agencies (25%) already possessed an ISO class 1 rating. Of the remaining six agencies only one (16.66%) was actively seeking to improve its ISO rating. The other five (83.33%) accredited, non ISO class 1 agencies, had chosen to

forego any attempts to increase their ISO rating.

There were no remarks or comments regarding ISO on any surveys from this particular group.

Table 1
Results of Survey One – Questions 1 & 2

	Current ISO Rating	Is Agency Seeking to Improve ISO Rating?
Respondent 1	1	N/A
Respondent 2	1	N/A
Respondent 3	2	No
Respondent 4	2	No
Respondent 5	2	No
Respondent 6	3	Yes
Respondent 7	3	No
Respondent 8	3	No

Survey number two (see Appendix C) was used to obtain information from those agencies who were designated as registered agencies with the CFAI in August of 1998. Two of the twenty two respondents had already received an ISO class one rating. Of the twenty remaining agencies that responded to the survey (see Table 2), twelve departments (60%) were not attempting to increase their ISO rating while 8 departments (40%) were seeking to better their ISO classification. The data obtained also revealed that the average classification of those registered departments seeking an improvement in their ISO rating was 3.00. The average ISO rating of those registered departments not attempting to increase their ISO rating was 3.75.

Some of the remarks and comments provided by the respondents to survey number two concerning ISO are listed in appendix J.

Table 2
Results of Survey Two – Question 1 & 2

	Current ISO Rating	Is Agency Seeking to Improve the ISO Rating?	
Respondent 1	2	Yes	
Respondent 2	2	Yes	
Respondent 3	2	Yes	
Respondent 4	3	Yes	
Respondent 5	3	Yes	
Respondent 6	4	Yes	
Respondent 7	4	Yes	
Respondent 8	4	Yes	
Respondent 9	2	No	
Respondent 10	3	No	
Respondent 11	3	No	
Respondent 12	3	No	
Respondent 13	3	No	
Respondent 14	4	No	
Respondent 15	4	No	
Respondent 16	4	No	
Respondent 17	4	No	
Respondent 18	4	No	
Respondent 19	4	No	
Respondent 20	8	No	

In examining the results of survey number four (see Appendix G) which targeted all Broward County, Florida fire departments, it was found (see Table 3) that 78.97% (15) of the respondents indicated that they were actively attempting to improve their current ISO rating. Four departments (21.05%) within this survey group were not actively attempting to increase their ISO rating. The average ISO rating among these fifteen departments was 4.00. Interestingly, only three respondents (15.78%) were very familiar with the CFAI accreditation process and only ten (52.63%) were somewhat familiar with the process. Only six of the respondents (31%) had purchased a CFAI self assessment manual.

Remarks and comments provided by the respondents to survey number four are

included in appendix J.

Table 3Results of Survey Number Four

	Q1	Q2	Q3 C)4 Q	5 Q6	
	ISO	Is	How	Have	Do you plan	Do you plan
	Rating	Agency	familiar	you	on	on seeking
		seeking	are you	purchas	conducting	accreditation
		to	with	ed a	assessment	?
		Increase	CFAI?	CFAI	?	
		ISO		manual?		
		rating?				
Respondent 1	2	Yes	Some	No	No	No
Respondent 2	3	Yes	Some	Yes	Yes	No
Respondent 3	3	Yes	Some	Yes	Yes	Yes
Respondent 4	3	Yes	Some	No	No	No
Respondent 5	3	Yes	Vaguely	No	No	No
Respondent 6	3	Yes	Not	No	No	No
Respondent 7	4	Yes	Some	No	No	No
Respondent 8	4	Yes	Not	No	No	No
Respondent 9	4	Yes	Some	Yes	No	No
Respondent 10	4	Yes	Vaguely	No	No	No
Respondent 11	5	Yes	Vaguely	No	No	No
Respondent 12	5	Yes	Very	Yes	Yes	No
Respondent 13	5	Yes	Very	Yes	Yes	Yes
Respondent 14	6	Yes	Not	No	No	No
Respondent 15	6	Yes	Not	No	No	No
Respondent 16	3	No	Some	No	No	No
Respondent 17	4	No	Very	Yes	Yes	Yes
Respondent 18	4	No	Some	No	Yes	No
Respondent 19	6	No	Some	No	No	No

The comments (see Appendix J) do indicate that any improvement in an ISO rating does result in increased marketability. There are still some unanswered questions. What are the costs incurred by a community for this type of marketing advantage? Have the leaders of agencies that attempt to garner an ISO class 1 or 2 rating conducted a cost/benefit analysis? When the community experiences a drop in fire insurance premiums as a result of an ISO rating improvement, the fire department is looked upon

very favorably. The comments received with some of the surveys (see Appendix J), particularly those evolving out of survey number four, indicate that some chiefs are still trying to increase their ISO ratings for the wrong reasons. Cleveland (1990) described many of these flawed reasoning processes.

The researcher concludes that the ISO grading process is a poor organizational planning tool and should not be used as such. The ISO grading has some limited, yet very expensive, marketing advantages. These advantages would not be cost effective for the Sunrise Fire Rescue Department.

2. Should Sunrise Fire Rescue continue to seek an improved ISO classification?

An interview was conducted on September 14th, 1998 with Ms. Carol Setzer, an insurance agent with State Farm Insurance, Inc.. The purpose of the meeting/interview was to review the State Farm and Florida Joint Underwriting Association (JUA) premium schedules. State Farm is the largest property insurer in the state of Florida. In setting rates for residential properties, both the State Farm and JUA premium guides list the same insurance rate for ISO classes one through five. Hence the owner of a \$150,000 in an ISO class 1 city will pay \$1460 per year for homeowners insurance as will the owner of an identically priced home in an neighboring city with an ISO rating of 5. Thus for the majority of Sunrise residents, there will be no insurance savings as a result of increasing the ISO rating any more. Commercial properties would see some, but not excessive, reductions in their insurance rate. A review of the 1995 ISO *Evaluation Report to the City of Hartford, Connecticut*, indicated that the change from an ISO 2 to and ISO 1 "will affect typical mercantile properties to a degree depending on the type of building construction, the hazard of occupancy, and other property premium

calculations. The overall effect [reduction] is usually about 2.4%." As indicated earlier in this project, ISO rating improvements above a five typically do not change significantly for commercial properties which are sprinklered.

In conclusion owners of residential properties in Sunrise will see no benefit from an ISO rating improvement. Since most commercial occupancies in Sunrise are sprinklered, many of these property owners will see no benefit from an ISO rating improvement.

Moreover, many of the largest commercial property owners in Sunrise have already received considerable tax breaks and fee reductions to entice their relocation into the City. The **active** efforts to improve the ISO rating in the City of Sunrise should be discontinued because it is not cost effective.

3. Should Sunrise Fire Rescue utilize the CFAI self assessment process as a means for improving service quality?

As a result of the literature review and surveys, it was easy to see that the overwhelming majority of personnel who have been involved in the CFAI self assessment and accreditation processes speak very positively of the benefits and outcomes. Question three in survey number one asked the respondents to agree or disagree with twelve statements. These statements were constructed largely in part from the benefits of accreditation described in the CFAI's *Fire and Emergency Service Self Assessment Manual*. Statement nine specifically addresses the issue of marketability. Of the eight agencies that had received accreditation by August of 1998, respondents from all of the agencies agreed with all of the statements. The only exception was one respondent who disagreed with only one statement – Accreditation has provided a forum for communication of management philosophies within our organization. Thus ninety five of ninety six responses (98.95%) were positive. In

seeking to test the effect of job satisfaction upon member of the Newburgh, New York
Fire Department, Vatter (1996) wrote, "Fire service paradigms are changing as this
paper is written. Change oriented fire departments are recreating and thereby redefining
themselves continually. The Newburgh Fire Department must embark on this
process..." Vatter went on to recommend, "The fire department [Newburgh]
management should aggressively pursue the IAFC accreditation program." Perhaps
Vatter saw the accreditation program as a way of assisting an agency to deal with
change. As previously mentioned in this paper, the CFAI has identified four major
reasons for conducting an evaluation of fire service programs. The City of Sunrise is
trying to cope with change, has had a change in leadership, is trying to raise the level of
professionalism with the organization, and is in need of organizational evaluation to
ensure effectiveness.

Therefore, the results of this research project clearly indicates that the CFAI self assessment and accreditation processes will be of significant benefit to the Sunrise Fire Rescue organization. Initiation of these processes should begin immediately.

4. How has the application of the CFAI self assessment/accreditation process impacted other agencies?

The biggest impact of the accreditation and self assessment processes has been the issue of time. Mullen (1995) wrote, "...hours spent on accreditation do represent time deducted from other fire department functions and as such have an inherent value." Several of the those responding to surveys three and four indicated that the reason that they were not pursuing accreditation was due to the significant amount of time required. In conducting the research, it was discovered that there were six agencies that were

initial beta test sites for the accreditation model but never received accreditation. The six departments were: Auburn, Alabama; Cedar Rapids, Iowa; Greer, South Carolina; Kingston, Massachusetts; McKinney, Texas; and Springfield, Oregon. These were the only identifiable agencies that had begun the process and not been awarded accreditation. Several of these agencies were contacted to ascertain why they did not receive accreditation. A few of the individuals interviewed did not wish to have their comments publicized. Chief Chris Harvey, of the Greer, South Carolina Fire Department explained that, "The original beta test agencies did not have an assessment manual for guidance, the current assessment manual would have been a huge help." (personal communication September 16, 1998). The Greer Fire Department had only twenty three personnel and did not have the resources to complete the process in such a short time. Harvey continued, "The original time frame of six months for completion of the self assessment process was unrealistic, and there were some interpretation issues." Nonetheless. Chief Harvey remained supportive of the CFAI assessment process. "It is a valuable tool" continued Harvey. "Because of the process we are continually improving." Harvey recommended the process but did offer the following thought. "You will always have in the back of your mind as to whether or not your political leadership will continue to fund it [re-accreditation]."

Chief Jon Albreghini of the Kingston, Massachusetts Fire Department stated, "We volunteered as a beta site because it seemed like a progressive thing to do" (personal communication, September 16, 1998). Chief Albreghini, like Chief Harvey soon found that the time and resources required to complete the assessment/accreditation processes became overwhelming. Chief Albreghini did however state, "We enjoyed the

process and a lot of good things came out of it, the department is much better as a result." (personal communication, September 16, 1998). Thus it can be reasoned that the original beta test departments were working without the benefit of the manuals and tools that exist today for assisting agencies through the accreditation process. The accreditation model has since been redesigned several times to overcome the original problems that these departments faced.

In conclusion, based upon the comments and feedback received from the respondents of surveys one and two (see Appendix J), as well as from the interviews and literature review, accreditation will impact an agency by requiring a considerable commitment of time and nominal amount of funding. The greatest impacts, however, are the positive results, organizational growth, improved service, self analysis, professional growth, and increased marketing opportunities that most often result from the self assessment and accreditation processes.

DISCUSSION

Walter (1996) was correct in her statement, "Every day, local elected leaders and fire chiefs are faced with decisions that relate to providing fire protection and EMS for their communities. Now more than ever, these local leaders are faced with the constant pressure of doing more with less, and many local government executives are hard pressed to justify any increase in expenditures unless they can be attributed directly to improved or expanded service delivery within the community." Part of the problem that has resulted in continued controversy surrounding the ISO/fire department interface issue was addressed by Cleveland (1990). He stated, "Despite the advice from ISO and some public administrators, many fire chiefs still use the schedule as a standard to measure overall department effectiveness. As was noted earlier, budgetary requests for human and capital resources are often made strictly in terms of potential effect on the local fire departments." Cleveland went on to quote several fire chiefs who were dissatisfied with the ISO process. O'Dowd (1994) characterized the ISO grading schedule as antiquated. The question that needs to be answered here is - why are these people upset with the ISO grading system? Many authors, (Cleveland, 1990; Dykstra, 1989; Harnish, 1997; Marsh, 1996; Van Cleemput, 1995; Yaudes, 1990) recognized that the ISO grading schedule was never designed for fire department usage, and should not be used to evaluate fire departments for purposes other than insurance premium determination. Dutton (1994) summed this up very effectively by stating, "In reviewing ISO's past history, it is not hard to understand why the perception of many city administrators and fire chiefs is that compliance of ISO recommendations be a must. There were no other guidelines."

There does now exist a comprehensive planning and evaluation tool designed specifically for the fire service and ultimately the community it serves. This tool is the CFAI self assessment process. The research conducted for this project concludes without a doubt that the self assessment process is a highly effective planning tool. It is viewed almost universally by those who have used it as effective and helpful. Yes it is time consuming but it is considered by most to have been time well spent improving their organizations.

As has been previously cited, we must as modern municipal service managers operate in a manner that balances efficiency with effectiveness. If the City of Sunrise Fire Rescue followed the recommendations of ISO's last report to the City (1993), in order to achieve an ISO 1 rating, the expenses would far outweigh the benefits. One dispatcher on each shift around the clock (\$98,368), an extra fully staffed engine company around the clock (\$300,000 capital - \$399,868 personnel), a second aerial ladder staffed full time (\$600,000 capital - \$289,752 personnel) and an additional firefighter on each existing engine company (\$550,580) would require increasing the fire department budget by 23% the first year with constant and escalating personnel costs in subsequent years. This is extremely hard to justify in a community (Sunrise) that has less than 140 structure fires a year, has an average response time of 4.16 minutes, and a total fire dollar loss of \$825,712 with no fatalities during 1997. As demonstrated earlier in this project, very few property owners in Sunrise would realize a reduction in fire insurance premiums as a result of an improved ISO rating. Thus any active attempts to seek ISO rating improvement should not be attempted.

As a modern fire service manager, the researcher, like many others in the municipal

management arena has to constantly evaluate the cost effectiveness of various programs. Sunrise Fire Rescue exists as an efficient fire and emergency service provider. Continuous quality improvement should and must occur. The application of the CFAI self assessment process will be a positive step forward in ensuring the quality, professionalism and ultimately, the survivability of the organization.

RECOMMENDATIONS

As a result of the information, opinions, and data gathered during this research project, the following recommendations are presented.

- The Sunrise Fire Rescue Department should discontinue any active efforts to bring about a more favorable (lower) ISO rating.
- 2. The Sunrise Fire Rescue Department should begin the CFAI self assessment process as soon as possible
- 3. The self assessment project leader for any department including Sunrise should not have too many other duties within the organization. Many agencies have indicated the use of ,or the need for, a full time coordinator to handle the assessment and accreditation efforts. While a full time accreditation manager is not necessary, the project leader should have sufficient time to devote to the project.
- 4. Staff members should immediately be briefed on the accreditation process.
- Each staff member should be issued copies of all core competencies
 and performance indicators that may affect his/her specific area of responsibility.
- A presentation should be prepared for all members of the department prior to the initiation of the self assessment process.
- 7. The Sunrise Fire Rescue Department should endeavor to attain accreditation within the next 24-36 months.
- 8. The IAFC and ICMA as the driving forces behind the development of the CFAI accreditation process should increase efforts to educate both the fire service and the municipal management arena in both original purpose of the ISO classifications, and the redirection of fire department evaluation and planning efforts towards the more

- applicable CFAI accreditation process.
- 9. All fire and rescue agencies, regardless of size, composition and resources, should purchase a copy of the CFAI *Fire and Emergency Services Self Assessment Manual*. Fire and emergency service managers would be well served to review this manual while conducting strategic planning as well as day to day operations.
- 10. All fire and rescue agencies should endeavor to conduct a self assessment as soon as possible. Regardless of whether or not an individual agency chooses to pursue accreditation, the self assessment is invaluable in identifying organizational strengths and weaknesses.
- 11. ISO should once again revise its grading schedule, perhaps in time for the year 2000. The new schedule should include input from various fire service leaders and reflect recent changes in technology. Credit should be given for such innovations as class A foam, thermal imaging cameras, large diameter hose, computer aided dispatch, mobile data retrieval, and enhanced communications systems among other things which directly evaluate a fire departments capability to suppress and contain fires.
- 12. During the next revision of its *Executive Development Course*, the national Fire Academy should examine the possibility of including information on the topics of ISO grading and professional accreditation within chapter 10, titled *Service Quality/Marketing*.
- 13. Sunrise Fire Rescue as well as other agencies seeking accreditation must remain keenly aware of the issues of timeliness when seeking accreditation. Once a registered agency transitions to applicant status, they have a maximum of 18

months to complete the self assessment process and receive a site visit. The minimum time permitted between the change to applicant status and a site visit is 12-14 months. Thus it is imperative that an agency strategically plan the process to allow sufficient time to create and compile the necessary documents yet not allow to much time to pass so as to give rise to disinterest by those involved in the process.

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APPENDIX A

Survey Number 1 Survey of CFAI Accredited Departments

De	Department Name:	Date:
1.	. What is your department's current ISO rating	?
2.	attempting to increase your ISO rating? ☐ Y	
3.	Please respond accordingly to the following stagency's receipt of accreditation:	atements regarding your
•	Accreditation has promoted excellence within Yes No	our organization.
•	Accreditation has encouraged continuous qua	ality improvement in our agency.
•	Accreditation identified organizational strengt Yes No	hs in our agency.
•	Accreditation identified organizational weakn Yes No	esses in our agency.
•	Accreditation provided a forum for the community within our organization. Yes No	unication of management philosophies
•	Accreditation has resulted in growth for our or Yes No	ganization and its personnel.
•	Accreditation has helped increase pride in ou	r organization from our members.
•	Accreditation has helped increase pride in ou leaders. Yes No	r organization from our community
•		r organization from our citizens.
•	The accreditation process has been worth the	e investment of time and resources.
•	Our agency will take the necessary steps to re	enew our accreditation when it expires
•	Our community leaders (i.e. City Manager, Mattempts to become accredited	ayor, etc.) were supportive of our

4. Why did your agency initially choose to pursue accreditation?
5. What has been the greatest single benefit your organization has achieved as a result of receiving accreditation ?
 6. Who in your organization was the project leader during the self assessment process? Fire Chief Staff Officer An accreditation manager (civilian) A committee or task force Other
7. Please describe any negative aspects of the CFAI process that may have impacted your department.
Name of person completing surveyphone
When completed, please forward this survey no later than August 7, 1998 to:
Thomas J. O'Connell Sunrise Fire Rescue 10440 W. Oakland Park Blvd Sunrise , Florida 3351 Fax 954-746-3455

Thank you very much for your assistance with this project.

APPENDIX B

Letter Accompanying Survey # 1 (Sample)

July 31, 1998

Mr. XXXXX Fire Chief City of XXXXX XXXXX Street XXXXX, XX 00000

Dear Chief XXXXX:

Congratulations on your department's receipt of accreditation from the Commission On Fire Accreditation International.

I am a participant in the National Fire Academy *Executive Fire Officer Program*. One of the requirements of this program is the completion of an applied research project. I have chosen the topic of fire service accreditation in part, because my agency, Sunrise Fire Rescue, is currently contemplating the pursuit of CAFI accreditation. Thus, the information gathered in this project will not only fulfill my educational requirements, but will assist my department in its decision, and possibly quest, for accreditation.

I would like to request your assistance in helping me accomplish these objectives. I have enclosed a survey form with several questions regarding your agency and the accreditation process. With your completion of this form I will be able to obtain insight into the accreditation process as applied to various agencies throughout North America. Additionally, I have enclosed a self addressed – stamped envelope for the return of this questionnaire. Because of time constraints, I would like to request that the survey instrument be returned within the next 14 days.

I hope that I am not imposing on you too much and will be grateful for any and all assistance you can provide. Should you have any questions please do not hesitate to telephone me at 954-746-3412. Thank You.

Very truly yours,

Thomas J. O'Connell Training Director/EFO student

APPENDIX C

SURVEY NUMBER 2 Survey of CFAI Registered Agencies

Department Name:	Date:			
What is your department's current	t ISO rating ?			
. If your department's ISO rating is more than a One, are you actively attempting to increase your ISO rating? ☐ Yes ☐ No				
3. Why has your department chosen t Accreditation International (CFAI)	to register with the Commission on Fire?			
4. Has your department started the C □ Yes □ No	FAI self assessment process ?			
5. How do you think the CFAI self as department?	sessment process will help your			
 Currently, is your department seel ☐ Yes ☐ No 	king to attain CFAI accreditation?			
	ment chosen to pursue CFAI accreditation?; nt chosen not to pursue CFAI accreditation?			
Name of person completing survey _				
Thomas J. O'	ard this survey no later than August 7, 1998 Connell			
Sunrise Fire I Fax 954-746				
Thank you very much for your				

APPENDIX D

Survey Letter for survey # 2 (Sample)

July 31, 1998

Mr. XXXX Accreditation Manager XXXXX Fire Department XXXXX Street XXXXX, XX 00000

Dear Mr. XXXXX:

According to the International Association of Fire Chiefs' Accreditation Manager, your department has registered with the CAFI for entry into the accreditation program

I am a participant in the National Fire Academy *Executive Fire Officer Program*. One of the requirements of this program is the completion of an applied research project. I have chosen the topic of fire service accreditation in part, because my agency, Sunrise Fire Rescue, is currently contemplating the pursuit of CAFI accreditation. Thus, the information gathered in this project will not only fulfill my educational requirements, but will assist my department in its decision, and possibly quest, for accreditation.

Because your department has already chosen to pursue self assessment/accreditation, I would like to request your assistance in helping me accomplish the aforementioned objectives. I have enclosed a survey form with several questions regarding your agency and the accreditation process. With your completion of this form I will be able to obtain insight into the accreditation process as applied to various agencies throughout North America. Additionally, I have enclosed a self addressed – stamped envelope for the return of this questionnaire. Because of time constraints, I would like to request that the survey instrument be returned within the next 14 days.

I hope that I am not imposing on you too much and will be grateful for any and all assistance you can provide. Should you have any questions please do not hesitate to telephone me at 954-746-3412. Thank You.

Very truly yours,

Thomas J. O'Connell
Training Director/EFO student

APPENDIX E

Survey Number 3 Survey of ISO Class 1 Departments Date:

Department Name:		Date:	
1.	For how many years has your department o	enjoyed an ISO class 1 rating?	
2.	How has the attainment of an ISO class 1 rall.e., image, morale, efficiency etc	ating helped your department?	
3.	How familiar are you with the <i>Commission</i> (CFAI) accreditation and self assessment		ıl
	 Very familiar with the criteria and what Somewhat familiar with the criteria and Only familiar that the programs exist Not familiar with <i>CFAI</i> accreditation an 	what is involved in the programs	
	ou not familiar with the CFAI programs, plea with the survey.	ase stop here – all others please co	ontinue
4.	Has your agency purchased a CFAI self as	sessment manual ? 🗆 Yes 🗅 No)
5.	At this time, Does your agency plan on concriteria? Yes No If you answered no for question # 5 pleas	_	ne <i>CFA</i>
6.	At this time, Does your agency plan on pur Yes No If you answered no for question # 6 pleas	_	?

	thas decided to pursue the CFn, please explain why?	FAI self assessment process	
Name of person com	pleting survey	phone	
When completed, to:	please forward this surv	ey no later than August 7, 19	98
	Thomas J. O'Connell Sunrise Fire Rescue 10440 West Oakland Park Sunrise, Florida 33351 Fax 954-746-3455	Blvd.	

Thank you very much for your assistance with this project

APPENDIX F

Letter Accompanying Survey Number 3 (SAMPLE)

August 12, 1998

Mr. XXXXX Fire Chief XXXXX Fire Department 275 XXXXX Street XXXXX, XX, 00000

Dear Chief XXXXX:

Congratulations on your department's achievement of an ISO class 1 rating.

I am a participant in the National Fire Academy *Executive Fire Officer Program*. One of the requirements of this program is the completion of an applied research project. I have chosen the topic of fire service accreditation in part, because my agency, Sunrise Fire Rescue, is currently contemplating the pursuit of CAFI accreditation and the elevation of its ISO rating (currently a 3). Thus, the information gathered in this project will not only fulfill my educational requirements, but will assist my department in its decision to continue its pursuit of excellence.

Because your department has already achieved one of these benchmarks, I would like to request your assistance in helping me accomplish the aforementioned objectives. I have enclosed a survey form with several questions regarding your agency and the ISO / accreditation processes. With your completion of this form I will be able to obtain feedback on these processes from various fire service agencies such as yours throughout North America. Additionally, I have enclosed a self addressed – stamped envelope for the return of this questionnaire. Because of time constraints, I would like to request that the survey instrument be returned within the next 14 days.

I hope that I am not imposing on you too much and will be grateful for any and all assistance you can provide. Should you have any questions please do not hesitate to telephone me at 954-746-3412. Thank You.

Very truly yours,

Thomas J. O'Connell Training Director/EFO student

APPENDIX G

SURVEY NUMBER 4

Survey of Broward County Fire Rescue Departments

Department Name:	Date:
What is your department's current	nt ISO rating ?
If your department's ISO rating is attempting to increase your ISO	
3. How familiar are you with the Co (CFAI) accreditation and self as	ommission on Fire Accreditation International ssessment processes ?
Somewhat familiar with theOnly familiar that the progra	a and what is involved in the programs criteria and what is involved in the programs ms exist editation and self assessment processes
If you not familiar with the CFAI pro on with the survey.	grams, please stop here – all others please continue
4. Has your agency purchased a C	FAI self assessment manual? ☐ Yes ☐ No
5. At this time, Does your agency p criteria? Yes No If you answered no for question	olan on conducting a self assessment using the CFAI on # 5 please indicate why:
 At this time, Does your agency p ☐ Yes ☐ No If you answered no for question 	lan on pursuing accreditation from the CFAI?
Name of person completing survey	/phone
When completed, please for to:	ward this survey no later than August 7, 1998
Thomas J.	
Sunrise Fir Fax 954-74	

Thank you very much for your assistance with this project

APPENDIX H

Letter Accompanying Survey Number 4 (SAMPLE)

August 13, 1998

Mr. XXXXX Fire Chief XXXXX Fire Rescue 2801 XXXXXXX Drive XXXXXX, XX, 00000

Dear Chief XXXXX:

I am a participant in the National Fire Academy *Executive Fire Officer Program*. One of the requirements of this program is the completion of an applied research project. I have chosen to research the topic of fire service accreditation. The information gathered in this project will not only fulfill my educational requirements, but will assist my department in its pursuit of excellence.

I would like to request your assistance in helping me complete this project. I have enclosed a survey form with several questions regarding your agency and the ISO / accreditation processes. With your completion of this form I will be able to obtain feedback on these processes from various fire service agencies such as yours. Additionally, I have enclosed a self addressed – stamped envelope for the return of this questionnaire. Because of time constraints, I would like to request that the survey instrument be returned within the next 14 days.

I hope that I am not imposing on you too much and will be grateful for any and all assistance you can provide. Should you have any questions please do not hesitate to telephone me at 954-746-3412. Thank You.

Very truly yours,

Thomas J. O'Connell
Training Director/EFO student

Appendix I List of Agencies Participating in the Surveys

CFAI accredited agencies responding to survey number 1

Bellevue Fire Department - Bellevue, Washington
Countryside Fire Protection District - Vernon, Illinois
Culver City Fire Department - Culver City, California
Greensboro Fire Department - Greensboro, North Carolina
Lincoln Fire Department - Lincoln, Nebraska
Los Alamos Fire Department - Los Alamos, New Mexico
Naperville Fire Department - Naperville, Illinois
Tempe Fire Department - Tempe, Arizona

CFAI registered agencies responding to survey number 2

Altamonte Springs Fire Rescue – Altamonte Springs, Florida Anne Arundel County Fire Department – Maryland Austin Fire Department – Austin, Texas Baltimore County Fire Department – Maryland Burnsville Fire Department - Burnsville, Minnesota Chandler Fire Department - Chandler, Arizona Coral Gables Fire Rescue – Coral Gables, Florida Henderson Fire Department – Henderson, Nevada Henrico County Fire Department – Virginia Howard County Fire Department – Maryland Key Biscayne Fire Rescue – Key Biscayne, Florida King of Prussia Fire Department – King of Prussia, Pennsylvania Knoxville Fire Department – Knoxville, Tennessee Largo Fire Rescue – Largo, Florida Menasha Fire Department - Menasha, Wisconsin Nashville Fire Department – Nashville, Tennessee Oak Park Fire Department – Oak Park, Illinois Port Huron Fire Department – Port Huron, Michigan Round Rock Fire Department – Round Rock, Texas Southlake Fire Department – Southlake, Texas Tulatin Valley Fire Rescue – Tulatin, Oregon Tulsa Fire Department – Tulsa, Oklahoma

ISO class 1 fire departments responding to survey number 3

Anaheim Fire Department – Anaheim, California Fallon-Churchhill Fire Department – Fallon, Nevada Glendale Fire Department – Glendale, California Hartford Fire Department – Hartford, Connecticut Hialeah Fire Rescue – Hialeah, Florida
Hoboken Fire Department – Hoboken, New Jersey
Las Vegas Fire Department - Las Vegas, Nevada
Lisle-Woodridge Fire Department – Lisle, Illinois
Los Angeles Fire Department – Los Angeles, California
Miami Fire Department – Miami, Florida
Santa Ana Fire Department – Santa Ana, California
Skokie Fire Department – Skokie, Illinois
Springfield Fire Department – Springfield, Illinois
Stockton Fire Department – Stockton, California
Torrance Fire Department – Torrance, California
Vernon Fire Department – Vernon, California

Broward County, Florida fire departments responding to survey number 4

Broward County Fire Rescue – Ft. Lauderdale, Florida Coral Springs Fire Rescue – Coral Springs, Florida Dania Beach, Florida Davie Fire Department – Davie, Florida Hallandale Fire Rescue - Hallandale, Florida Hollywood Fire Rescue – Hollywood, Florida Lauderdale Lakes Fire Department – Lauderdale Lakes, Florida Lighthouse Point Fire Department – Lighthouse Point, Florida Margate Fire Rescue – Margate, Florida Miramar Fire Rescue – Miramar, Florida Oakland Park Fire Department – Oakland Park, Florida Parkland Fire Department – Parkland, Florida Pembroke Park Fire Rescue – Pembroke Park, Florida Pembroke Pines Fire Rescue – Pembroke Pines, Florida Plantation Fire Rescue - Plantation, Florida Pompano Beach, Florida Port Everglades Fire Department – Hollywood, Florida Tamarac Fire Rescue – Tamarac, Florida

Wilton Manors Fire Department – Wilton Manors, Florida

APPENDIX J

Comments Provided by Survey Respondents

Survey One – Question 4

"To implement a process of continuous improvement"

"To take a critical look at all of the Department's programs and operations to see how well we were doing them and where we needed to improve"

"The best way for an organization to implement strategic planning and process improvement is to establish goals based on where you are and where you are going. If your goal is to be the best, you have to benchmark against the best."

"Provide quality assurance of the CFPD operations to the firefighters, public officials, residents and business community"

"Identify areas of strength and weakness, and provide planning to resolve areas of weakness."

"An opportunity to improve the department based on an in-depth assessment"

"Was looking for a model to assess our programs in terms of community need and quality of service delivered"

"Thought we were a credible organization – sought verification of same"

Survey One – Question 5

"Putting in place a valid and respected process that requires documented and demonstrated progress in self improvement"

"Having developed a 5 year strategic plan with the information developed from the self assessment"

"In a word, "clout". International accreditation tells your leaders, your customers and indeed the world that you are in fact a world class agency. The confidence that accreditation imparts to others, allows the agency to deal with others on a "higher ground". Organizational pride and motivation to continue excellence are also benefits."

"Statewide recognition is hard to beat. But I think having the confidence to know that after completing the process you have addressed all of the issues that may be raised either internally or by external forces."

"The detailed self assessment based on a nationally developed allowed us to comprehensively look at all aspects of the department"

"Intimate knowledge of our organization resulting from the comprehensive self assessment, risk management, and strategic planning"

"We were able to better plan for the future"

Survey Two – Question 3

"Our department needed a self assessment process to go through as a guideline. It will also give us the help in letting our community & local government know our usefulness as well as our efficiency/effectiveness toward this community."

"Because it establishes standards and best management practices for fire department administration"

"The Department has a history of fire service excellence and we wish to continue down the road of professionalism"

"We wanted to provide a detailed evaluation of the department and the services we provide. We also want to be an organization with defined missions and objectives and strive to meet or exceed them"

"A tool for organizational self improvement and to assist with planning efforts"

"It will identify problems which can correct and improve our system"

"Serves as validation tool for providing quality service"

"We are primarily seeking an objective means of benchmarking"

"Nothing can improve until it measures"

"Motivational tool for membership – goal oriented"

"Reduces liability"

"We believe this will make us a better fire dept. by a thorough self examination and we believe it is the future."

Survey Two – Question 7

"It will open doors to special funding privileges and justify budget allocations"

"It will help us identify our strengths and weaknesses and enhance customer service"

"We believe this is a more comprehensive analysis of services provided and value to the community. Also how we compare to similar sized departments"

"CFAI is a credible, professional process that has been built on a firm foundation. The program appears to meet the opportunities the organization needs to assure our present and future direction"

"To validate our self study"

"Self improvement"

"Highlights areas that could be improved in the organization and provides a one place reference document"

"Gives us a clear picture of where the organization is in relation to other comparable departments"

"It is an outstanding tool to promote and engender understanding of the fire service's comprehensive delivery system"

"The actual accreditation is a validation to the community and public officials that they are receiving value for service."

"It fosters community support"

"To improve professionalism and standardize our organization. To help us think and perform outside the normal process"

"National recognition"

"improve weaknesses and maintain strengths"

"Politicians will have a credible clear picture of the Department."

"Our many staff involved in the process will have increased their knowledge and ability."

Survey Three – Question 2

"Pride, morale. Important tool in marketing and political environments"

"The image of the fire department was enhanced professionally as well as in the community through attaining a Class 1 rating. Achieving the Class 1 rating has the further benefit of indicating to the members that their efforts have yielded a demonstrable benefit to the community. It is a source of departmental pride and serves

as a motivating factor in maintaining the level of performance upon which the rating is based."

"ISO Class 1 rating has brought many attributes to our F.D. pride, dignity, respect, and recognition are a few of the words that describe the mood of the department"

"Many firefighters will go that extra mile to improve our services which are expected from a class one department. Not only has the Class 1 rating improved the F.D. but it has helped local businesses acquire lower insurance rates."

"Image!"

"City's business community has experienced favorable reduction in commercial insurance rates. Rating continues to show our department as exceptional in fire service"

"We believe the ISO grading system does not have the best interest of the fire service in its role as an evaluator."

"The employees are very proud of our Class 1 rating...double edged sword – some people/politicians are proud of our Class 1 rating, while others feel it costs too much to maintain such a high rating"

"Improved morale – lessened the demeaning of administration by bargaining unit members"

"In my opinion the value of the accreditation process is that it addresses many areas left untouched by the ISO grading. A good ISO grading might indicate an ability to suppress fire but it says little about your ability to plan, prepare, and provide the wide variety of services required of a successful department."

"The attainment of an ISO Class 1 rating brought together a number of our finest employees to develop a plan and then work towards the goal of a Class 1"

"We have already started to conduct the self assessment process. The dept. has decided to pursue CFAI accreditation in addition to our ISO Class 1 rating."

Survey Three – Question 5

"Time & resources don't permit at this time"

"We have other more important projects to finish first"

"Don't know enough about it"

"perhaps in the future we will evaluate it"

Survey Three – Question 7

"To provide departmental compliance with a recognized benchmark"

Survey Four - Questions 5 and 6

"Attempting for a class 3 rating. Dept. will not enjoy anything but a headache. Big business will benefit."

"Attraction of business ventures to our area, increasing tax base. Accomplishment of departmental goal."

"A reduction in rating from a 5 to a 3 will result in a small, but significant, insurance cost savings to the community."

"A higher ISO rating is an artificial standard fire depts. are judged by so why not raise it."

"Will attempt to achieve a three. The returns of the cost of attaining a class 2 or 1 do not measure equally."

"Don't know enough about it"

"Additional information and discussion required of staff"

"Limited staff with too many other pressing issues."

"maybe"

"were not ready – maybe in a year or two"

"don't believe it would increase the readiness/preparedness or value of this fire department"

"more information is needed"

"still evaluating program"

"waiting for more info- not a priority right now"

"possibly, once the department establishes its own EMS system"

"will pursue after ISO review in mid 1999"